

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-3 (Cancelled Herein)

4. (Currently Amended) ~~The material composition of claim 2 having specific formula (Ba_{0.95}Fe_{0.05})TiO₃, wherein said saturation magnetization about 0.10: B/mol Fe at 300K, and the coercive fields about 16Oe at 300K. A ferromagnetic perovskite oxide having the formula (Ba_{0.95}Fe_{0.05})TiO₃, wherein the oxide has a saturation magnetization of about 0.10 μ _B/mol Fe at 300K, and a coercive field of about 16 Oe at 300K.~~

5. (Currently Amended) ~~The material composition of claim 2 having specific formula (Ca_{0.95}Fe_{0.05})TiO₃, wherein said saturation magnetization about 0.11: B/mol Fe at 300K, and the coercive fields about 12Oe at 300K. A ferromagnetic perovskite oxide having the formula (Ca_{0.95}Fe_{0.05})TiO₃, wherein the oxide has a saturation magnetization of about 0.11 μ _B/mol Fe at 300K, and a coercive field of about 12 Oe at 300K.~~

6. (Currently Amended) ~~The material composition of claim 2 having specific formula (Ba_{0.95}Fe_{0.05})ZrO₃, wherein said saturation magnetization about 0.11: B/mol Fe at 300K, and the coercive fields about 25Oe at 300K. A ferromagnetic perovskite oxide having the formula (Ba_{0.95}Fe_{0.05})ZrO₃, wherein the oxide has a~~

saturation magnetization of about $0.11 \mu_B/\text{mol Fe}$ at 300K, and a coercive field of about 25 Oe at 300K.

7. (Currently Amended) The material composition of claim 2 having specific formula $(\text{Ca}_{0.95}\text{Fe}_{0.05})\text{ZrO}_3$, wherein said saturation magnetization about $0.12 \mu_B/\text{mol Fe}$ at 300K, and the coercive fields about 4.5Oe at 300K. A ferromagnetic perovskite oxide having the formula $(\text{Ca}_{0.95}\text{Fe}_{0.05})\text{ZrO}_3$, wherein the oxide has a saturation magnetization of about $0.12 \mu_B/\text{mol Fe}$ at 300K, and a coercive field of about 4.5 Oe at 300K.

8. (Currently Amended) The material composition of claim 2 having specific formula $(\text{Ba}_{0.95}\text{Fe}_{0.05})\text{HfO}_3$, wherein said saturation magnetization about $0.125 \mu_B/\text{mol Fe}$ at 300K, and the coercive fields about 20Oe at 300K. A ferromagnetic perovskite oxide having the formula $(\text{Ba}_{0.95}\text{Fe}_{0.05})\text{HfO}_3$, wherein the oxide has a saturation magnetization of about $0.125 \mu_B/\text{mol Fe}$ at 300K, and a coercive field of about 20 Oe at 300K.

9. (Currently Amended) The material composition of claim 2 having specific formula $(\text{Ca}_{0.95}\text{Fe}_{0.05})\text{HfO}_3$, wherein said saturation magnetization about $0.12 \mu_B/\text{mol Fe}$ at 300K, and the coercive fields about 7Oe at 300K. A ferromagnetic perovskite oxide having the formula $(\text{Ca}_{0.95}\text{Fe}_{0.05})\text{HfO}_3$, wherein the oxide has a saturation magnetization of about $0.12 \mu_B/\text{mol Fe}$ at 300K, and a coercive field of about 7 Oe at 300K.

10. (Currently Amended) A method for producing a ferromagnetic perovskite oxide ceramics, said method comprises the steps:

(1) Preparing individual metal oxide according to the desired stoichiometry for amounts of:

(a) metal oxides at least one non-magnetic element selected from group of Ca, Sr, Ba, Pb, Y, La, Gd; (b) metal oxides of at least one magnetic

element selected from group of Fe, Co, Ni, Mn, and V; (c) metal oxides at least one non-magnetic element selected from group of Ti, Zr, Hf, Sn, Mo, Ta, W, Nb, Al.

(2) Mixing together said individual metal oxides (a), (b), and (c) to form a single mixture.

(3) Firing said mixture in argon or reducing atmosphere at temperature for a time sufficient to convert the said mixture to ~~s a~~ single phase ferromagnetic perovskite oxides.

11.-14. (Cancelled Herein)

15. (Currently Amended) ~~The material composition of claim 13 having specific formula La(Mo_{0.25}Fe_{0.75})O₃, wherein said magnetic Curie temperature is 940K, and the coercive fields about 238Oe at 300K. A ferromagnetic perovskite oxide having the formula La(Mo_{0.25}Fe_{0.75})O₃, wherein the magnetic Curie temperature of the oxide is as high as 940 K, and wherein the oxide has a coercive field of about 238 Oe at 300K.~~

16.-18. (Cancelled Herein)

19. (New) A ferromagnetic perovskite oxide having the formula (Ba_{1-x}Fe_x)TiO₃, where x ranges from 0 to 0.15, and wherein the oxide has a saturation magnetization of about 0.10 μ_B /mol Fe at 300K, and a coercive field of about 16 Oe at 300K.

20. (New) A ferromagnetic perovskite oxide having the formula (Ca_{1-x}Fe_x)TiO₃, where x ranges from 0 to 0.15, and wherein the oxide has a saturation magnetization of about 0.11 μ_B /mol Fe at 300K, and a coercive field of about 12 Oe at 300K.

21. (New) A ferromagnetic perovskite oxide having the formula (Ba_{1-x}Fe_x)ZrO₃, where x ranges from 0 to 0.15, and wherein the oxide has a saturation

magnetization of about $0.11 \mu_B/\text{mol Fe}$ at 300K, and a coercive field of about 25 Oe at 300K.

22. (New) A ferromagnetic perovskite oxide having the formula $(\text{Ca}_{1-x}\text{Fe}_x)\text{ZrO}_3$, where x ranges from 0 to 0.15, and wherein the oxide has a saturation magnetization of about $0.12 \mu_B/\text{mol Fe}$ at 300K, and a coercive field of about 4.5 Oe at 300K.

23. (New) A ferromagnetic perovskite oxide having the formula $(\text{Ba}_{1-x}\text{Fe}_x)\text{HfO}_3$, where x ranges from 0 to 0.15, and wherein the oxide has a saturation magnetization of about $0.125 \mu_B/\text{mol Fe}$ at 300K, and a coercive field of about 20 Oe at 300K.

24. (New) A ferromagnetic perovskite oxide having the formula $(\text{Ca}_{1-x}\text{Fe}_x)\text{HfO}_3$, where x ranges from 0 to 0.15, and wherein the oxide has a saturation magnetization of about $0.12 \mu_B/\text{mol Fe}$ at 300K, and a coercive field of about 7 Oe at 300K.